

A Theological Review of Approaching Models in the Dialog of Faith and Science

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Abstract

Scholars have been proposing numerous models in "reconciling" faith and science. All proposed models, generally, could be categorized into four approaches: conflict, independence, dialogue, and integration. Since models in approaching the dialog of faith and science, basically, express presuppositions of how someone view reality. In this essay, therefore, these models are reviewed in the light of how Christians should comprehend the reality through the Scripture: God reveals Himself in two ways, general and special. General revelation is the world as His creation, and special revelation is the His words that have been written in the Bible. Special revelation, fundamentally, is a metaphysical framework for Christians to understand God's creation. As the result, approaching model which cohere to biblical concept of one truth is integration model, which is, as some scholars call, the reconstruction or paradigmatic approach.

Keywords: *integration, faith and science, reconstruction, biblical Christian worldview.*

Introduction

Research on the dialog of faith and science has been conducted for centuries and still ongoing up to now. The discussion and debate are moving from various approaches and seeking a thesis as a formula to bridge faith and science. Some theologians believe that science does not cohere to faith and, therefore, must be firmly rejected,¹ consequently conclude that it is impossible for someone to be both a scientist and a believer.² On the other hand, a similar approach is also taken by some scientists who reject faith and offence religion with their theories and scientific data.³ In additional to these two groups, other figures take a different angle in viewing this discussion, which is there is no *overlap* between faith and science because the two have their own domains (*magisterium*).⁴ Another group views faith and science as "one science and another."⁵

¹ Alister E. McGrath, *The Foundations of Dialogue in Science and Religion* (Malden, Massachusetts: Blackwell Publishers, 1998), 3.

² William Provine, "Scientists Face It! Science and Religion Are Incompatible," *The Scientist* 2 (1988): 10.

³ Gordon H. Clark, *The Philosophy of Science and Belief in God*, 3rd ed. (Nutley, NJ: The Craig Press, 1964), 7.

⁴ Stephen Jay Gould, "Non-Overlapping Magisteria," *Natural History*, 1997, 16.

⁵ Nancy Murphy, *Reconciling Theology and Science: A Radical Reformation Perspective* (Kitchener, Ontario: Pandora, 1997), 2.

These various attitudes towards the encountering of faith and science are formulated in models of approaches that become a framework to be applied in answering the issues related to this tension. Obviously, the topics such as theories of origin,⁶ cosmology,⁷ and doctrine of creation,⁸ cannot avoid the tension of faith and science. Accordingly, the attitude of the scientists or theologians towards this tension will be clearly seen. However, more topics are not as 'demanding' as those topics and Christians' attitude on this problem cannot easily be detected. In fact, the attitude towards this tension, basically, is an expression of believers' faith and this essay aims to find the biblical model that can be used by Christians. Accordingly, the goal of this essay is limited to find the model which cohere to biblical truth, it will not go further to explore the biblical approaching model that will be found on this essay. Discussion will be started with analysis of some approaching models which have been proposed and used by scholars. Then, the presuppositions which assumes by the models will be reviewed theologically by the doctrine of revelation, the foundation of how Christians view reality.

Approaching Models

Basically, models express the basic assumptions and methods in linking the faith and science. Alister McGrath, for instance, divides the models into two large groups, which are: confrontation model dan non-confrontation model.⁹ The first model follows the legacy of the war between faith and science that has taken place in history, rejecting and not believing one another and tending to see the relationship as a war. While the non-confrontation model comprehends faith and science as truths that come from God (*all truth is God's truth*). Through these basic assumptions, "all advances and developments in a scientific understanding of the universe are to be welcomed and accommodated within Christian faith."¹⁰

Similar to McGrath's approach, Henry Morris views the problem in dichotomy way, rejecting science or accepting it, and there is no something in between.¹¹ David Lane, also, sees the relationship of faith and science in the context of dualistic creation, that no bridge can be made between faith and science.¹² Developing from the previous thoughts which only classified the approaching model into two groups, Bonting proposed three approaches: "enmity, neglect, and dialogue."¹³ A step more further, Ian Barbour have four groups in his category models. He summarizes and classifies the scholars' approaches as Conflict, Independent, Dialogue and Integration.

Responding to Barbour's model, Arthur Peacocke comes up with a type that included the differences and similarities that existed in the fields, approaches, languages, and theological and religious attitudes. Meanwhile, John Haught, including *conflict, contrast,*

⁶ Alister E. McGrath, *Science and Religion: An Introduction* (Malden, Massachusetts: Blackwell Publishers, 1999), 1.

⁷ Sjoerd L. Bonting, *Creation and Double Chaos : Science and Theology in Discussion* (Minneapolis: Fortress Press, 2005), 3.

⁸ Nancy Murphy, "What Has Theology to Learn from Scientific Methodology," in *Science and Theology*, ed. Murray Rae, Hilary, and John Stenhouse (Edinburgh: T&T Clark, 1994), 101.

⁹ McGrath, *Science and Religion: An Introduction*, 49.

¹⁰ McGrath, 49.

¹¹ Henry Morris and Gray E. Parker, *What Is Creation Science?* (San Diego: Creation-Life, 1982), 156.

¹² David H. Lane, "Special Creation or Evolution," *Bibliotheca Sacra* 151, no. 601 (1999): 31.

¹³ Bonting, *Creation and Double Chaos : Science and Theology in Discussion*, 1.

contact and *confirmation*. The first three models are actually very similar to Barbour's first three types, differing only in terminology. But the fourth type, *confirmation*, identifies a different type of relationship between faith and science than that identified by Barbour. Haught tends to take this type of relationship from the philosophy of science approach. One of the philosophical assumptions is that the universe is contingent: the elements and laws may have been different from what they are today. Thus, epistemologically observation and data collection are necessary to have a knowledge of an object or phenomenon. The empirical method that underlies science rests on the assumption that nature is contingent. This assumption, historically based on the Christian doctrine of creation and theology: God created the universe as an free act of His will, as a possibility, and God could have created it differently from what it is now.

Since there are various groupings of existing approach models, I will explain the models based on the parallelism of understanding, so that one terminology contains meaning which is also explained by other scholars with different terminology. Due to Barbour grouping is the most popular and tends to be used as a reference by scholars, I will use Barbour's terminology as the title, but in some parts, it will be adjusted to other scholars' thoughts.

1. Conflict

This approach sees faith and science as two conflicting disciplines. According to Barbour, this model includes two approaches, namely: scientific materialism and biblical literalism. Scientific materialism recognizes that the world consists only of matter, there is no room for soul, spirit or God. This view is rooted in the era of enlightenment in France and the empiricism of David Hume and the influence of the theory of evolution that is very popular among scientists. The adherents of this view believe two important premises, that are: "(1) the scientific method is the only reliable path to knowledge; (2) matter (or matter and energy) is the fundamental reality on the universe.¹⁴ This approach assumes that "only the entities and cause with which science deals are real; only science can progressively disclose the nature of the real."¹⁵ There is no other way that can deliver humans to the right conclusions as done by science both epistemologically and metaphysically. This approach makes public data and experimentation a reference to reject faith as a reliable source of knowledge. These references are based on the assumption that the only way to find out knowledge about nature is by the scientific method, there is no other approach or other sources that can provide possibilities for this as Barbour's explanation follows,

Science starts from reproducible public data. Theories are formulated and their implications are tested against experimental observations. Additional criteria of coherence, comprehensiveness, and fruitfulness influence choice among theories. Religious beliefs are not acceptable, in this view, because religion lacks such public data, such experimental testing, and such criteria of evaluation.¹⁶

¹⁴ Ian G. Barbour, *Religion and Science: History and Contemporary Issue* (San Fransisco: Harper, 1997), 78.

¹⁵ Barbour, 78.

¹⁶ Barbour, 78.

Contrast to the previous, a similar type of conflict model is biblical literalism. Barbour relates it to the church's attitude towards the development of science, such as the church's attitude toward Copernicus' and Galileo's statements on heliocentric and the church's attitude which rejects Darwin's theory of evolution. The reason for this rejection is that what science teaches is different from the literal interpretation of the Bible. For instance, heliocentric does not cohere to Joshua 10:12-13¹⁷ which implies that the sun surrounds the earth (geocentric). The literal reading of the verses of creation is different from the theory of evolution that was coined by Darwin, this causes Christians to reject Darwinism and assume the theory is wrong.

This conflict model fundamentally rejects any input from other fields and assumes that (1) the Bible is the word of God, the only true source of truth so that believers do not need truth outside the Bible or if it is not coherent, then that view must be wrong. Other assumptions are counter to the first assumption that states (2) science is the only legitimate way to achieve truth because it is empirical, objective and universal. What is put forward by science is a factually proven and experimentally the correct view.

2. Independence

According to scholars who hold this view, faith and science are in different domains and, therefore, do not have an area of the incision. Barbour said this approach is an attempt to avoid conflicts that occur between faith and science by proving that things that look contradictory between the two fields do not show the two are opposition but because they are in different areas (domain/ *magisteria*). Barbour says,

One way to avoid conflicts between science and religion is to view the two enterprise as totally independent and autonomous. Each has its own distinctive domain and its characteristic methods that can be justified in its own terms... Some authors assert that science and religion have differing perspectives on a common domain rather than differing domains of inquiry.¹⁸

This confirmed science and religion using different methods and different languages. Thus, no conflict arises and there is no interaction or even dialogue between the two because science and religion remain completely separate from one another.

Some scholars argue science and religion apply different research methods, one is based on faith and the other is empirical. In other word, reason is not in line with faith because they assume science was build based on facts while religion is based on values and norms. Science is more objective while religion is subjective, and both have no common ground.

In addition to the different research method, Barbour said this model views the separation of faith from science due to different languages. In terms of this language, Barbour said "their functions are totally different." Scientific language refers to a picture of the world, but religion uses language to describe emotions, hopes, and beliefs. This proves that the

¹⁷ At that time Joshua spoke to the LORD in the day when the LORD gave the Amorites over to the sons of Israel, and he said in the sight of Israel, "Sun, stand still at Gibeon, and moon, in the Valley of Aijalon." And the sun stood still, and the moon stopped, until the nation took vengeance on their enemies. Is this not written in the Book of Jashar? The sun stopped in the midst of heaven and did not hurry to set for about a whole day. (ESV)

¹⁸ Barbour, *Religion and Science: History and Contemporary Issue*, 84.

meaning of the language used by the two is very different and closes the possibility for a conflict or a relationship.

3. Dialogue

This view sees overlapping interests in which both provide their views without crossing the disciplinary boundaries. As a model for connecting faith and religion includes questions that lie at the edge or boundary of science, that is, questions raised by science, but they themselves are never able to answer. If the universe had a beginning, what happened before that? Why do humans feel compassion or altruism? Why does the universe exist? Others claim that the methods used by science to test their theories are not entirely different from those used by theology. Both use data (empirical facts for science, scriptures, religious experience, liturgy, etc.), involve a community of scholars who work together to find what is true, both using reason and also aesthetic values to choose from many theories that compete with each other. These similarities that emerge then become the capital for the two fields to conduct a dialogue. This type of dialogue is understood as a common ground that allows interaction but does not reach integration.

4. Integration

This last view is based on the thought "integration is possible between the content of theology and the content of science."¹⁹ So that the material in both fields can be integrated to complement each other and form a more "complete" thought. Barbour divides this type into several groups, which he calls natural theology, theology of nature and synthesis theology. Natural theology states that "the existence of God can be inferred from the evidences of design in nature, of which science has made us more aware."²⁰ There are some orthodox Christian figures who hold this view. Thomas Aquinas, for example, "offered several versions of the cosmological arguments for a First Cause (or necessary being on whom all contingent beings are dependent)."²¹ He also developed a teleological argument about the order and clarity of nature in general and evidence of the existence of the designer of the universe through certain natural phenomena. Besides Aquinas, Christian scientists in the modern era such as Newton, Boyle, and several other scientists in the modern era, "frequently extolled the evidences of benevolent design in nature."²²

This view assumes that nature as a creation cannot possibly be able to conceal His Creator, because nature itself proves evidence of the existence and nature of its Creator. Thus, through observation and research and sufficient ability of the mind, humans can find various things about God in nature. The knowledge that specifically examines and reveals the secrets of nature is science, so science is a science that not only reveals various secrets of nature but also knows things about the Creator of that nature. In short, this group believes that they can "meet" or know about God from His creation. One concrete example is from evolution to the

¹⁹ Barbour, 98.

²⁰ Barbour, 98.

²¹ Barbour, 99.

²² Barbour, 99.

existence of God. Observations and knowledge of the theory of origin bring humans to an understanding of the existence of God.

Theology of nature is in this approaching model. Theology of nature does not start a theology from nature as natural theology does, but rather “starts from a religious tradition based on religious experience and historical revelation.”²³ This view is very unique because although it does not start its theology from science, this view accepts and corrects the understanding of theology with the development of science. Barbour describes this approach,

It holds that some traditional doctrines need to be reformulated in the light of current science. Here science and religion are considered to be relatively independent sources of idea, but with some areas of overlap in their concerns, In particular, the doctrines of creation, providence, and human nature are affected by the findings of science. If religious are to be in harmony with scientific knowledge, some adjustments or modifications are called for.²⁴

The view does not neglect what the Bible teaches, but instead, the Bible is the point of reference. However, the formulation of theology is not only the result of exegesis of Biblical texts but also an intense dialogue with scientific discoveries in the concerned area.

In addition to theology of nature, another approach in this model is *systematic synthesis*. The aim of systematic synthesis is the combination of theology and science in a single framework. This systematic synthesis often combines both by using a single metaphysical system, for example, metaphysical processes such as those derived from Alfred Whitehead or Thomistic metaphysics. In this way, concepts such as space, time, matter, causality, mind, spirit, even God, are used in similar ways in both theological and scientific research and theory. This approach requires faith and science in a balanced manner as written by Barbour, “systematic integration can occur if both science and religion contribute to a coherent world view elaborated in a comprehensive metaphysics.”

Theological Review

Why theology of revelation, which is a theological approach, could be a reference for evaluating the integration of faith and science? Wouldn't be unfair to judge faith and science dialog in theological perspective, which is the domain of faith itself? The basic principle to do this is that God is the Creator of all things, and nothing exists without being created by God (Gen. 1: 1, John 1: 3). This presupposition is unnegotiable, God is the *principium essendi* of everything, meaning that everything that exists depends on and is designed by God. The meaning and purpose of the existence of all things are in God and can only be found in God. Without the knowledge of God, there is no true knowledge. On the other hand, it is impossible for humans to know the infinite God without God Himself revealing Himself. Our understanding of God depends on God's revelation to humans. Apart from His word (Bible), humans can also know God from His creation (world) because the creation communicates the Creator, both of which are called special revelations (Bible) and general revelation (creations).

Regarding the nature of revelation, Bavinck said “the relation between general or natural revelation and special revelation leads to questions about the relation between

²³ Barbour, 100.

²⁴ Barbour, 100–101.

believing and knowing."²⁵ Faith and science have very clear differences in their nature but both are disciplines that are equally "searching" for truth. The fundamental difference is in the starting point of these two fields. Faith does not conduct observations, research and various experiments such as science to deduce what is true. Faith accepts absolutely what the Bible says as truth. The Bible is the truth. For faith, truth is not the result that will be achieved but the starting point of the process of faith, then from the existing concept of truth, then humans seek for understanding. Consequently, the essence of faith that comes from special revelation is believing.

Meanwhile, science that has a source of study or research on general revelation, God's creation, must conduct observations and experiments in accordance with scientific research methods then the scientists draw conclusions formulating a theory. Tested theories that have not been falsified can be recognized as truth by science. The process that occurs from the beginning to the knowledge of secrets and natural laws can be called knowing. Something similar as Bavinck said relating to believing and knowing was also said by Hoeksema with different terminology but essentially the same.

Frequently these two forms of revelation are presented as if they were two wholly different revelations, not only distinct, but separated from each other. The one is adapted to reason as its subjective principle of knowledge, the other of faith. The one is a revelation of God to man in general, the other to His people in Christ.²⁶

Therefore, in actual integration models reflect the perspective, presupposition and method of linking faith and science can be evaluated based on the relationship of the main source of faith and science, namely the relationship between general revelation and special revelation. In this discussion, general revelation becomes a representation of science and special revelation becomes a representation of faith.

General Revelation

Charles Ryrie defined general and special revelation as "general revelation includes all that God has revealed in the world around us, including man [...] Special revelation includes various means He used to communicate His message in what was codified in the Bible [...] and called revealed theology."²⁷ Ryrie's statement is similar with what Swindoll and Zuck said "general revelation is revelation that is addressed to and therefore available to all people at all times."²⁸ Based on Ryrie's statement, general revelation is broadly defined as everything that exists in the universe, including humans themselves, even though revelation is directed at humans. Special revelations are much narrower than general revelation and are found, now, in the Bible.

Ryrie explained that this revelation is called general because it is for all people, not limited to one group, all places throughout the ages. He wrote,

²⁵ Herman Bavinck, *Reformed Dogmatics. Volume 1, Prolegomena*, trans. John Bolt and John Vriend (Grand Rapids, Mich: Baker Academic, 2003), 283.

²⁶ Herman Hoeksema, *Reformed Dogmatics* (Grand Rapids: Reformend Free, 1985).

²⁷ Charles C. Ryrie, 28.

²⁸ Charles Swindoll and Roy B. Zuck, *Understanding Christian Theology* (Nashville: Thomas Nelson, 2003), 654.

General revelation is exactly that – general. It is general in its scope; that is, it reaches to all people (Matt. 5:45; Acts 14:17). It is general in geography; that is, it encompasses the entire globe (Ps. 19:2). It is general in its methodology; that is, it employs universal means like the heat of the sun (vv. 4-6) and human conscience (Rom. 2:14-15).²⁹

Complementing the view of Ryrie, other theologians, Swindoll and Zuck, explain that the form of general revelation communicated through “natural phenomena.”³⁰ So, to all mankind God states something through the phenomena that appear in this universe and this phenomenon also includes the human, its existence, its ability, and the essence of the human being. This natural phenomenon broadly refers to God's creation, that the work of God's hands is a communication of the Creator himself.

Demarest states more clearly and in detail what is meant by Swindoll and Zuck with the natural phenomenon as follows, “general revelation, mediated through nature, conscience, and providential ordering of history, traditionally has been understood as a universal witness to God's existence and character,”³¹ and as explained earlier, these are aimed at all mankind. The view which is indeed quite uniform among orthodox Christian theologians here provides an affirmation for the sake of affirmation that the universe carries a certain message from the Creator. Although general revelation does not only cover the phenomena of the universe, but the aspects that previously mentioned (nature, conscience, and providential ordering of history) are classified in the term “creation.”

Ryrie explained the ways God gave general revelation through creation. He develops his argument from the assumption that what exists today came into existence either out of nothing or exist eternally. Thus, the present world (cosmos) can originate from nothingness or this cosmos is indeed eternal, existed from eternity and will still exist. From various possible views, Ryrie explained the theistic approach by asserting that the world was created by God as the Bible says. The world, surely, was created by God, the world of creation reflects God, but Ryrie asserted “this does not mean that the universe reveals all the details of the character of the eternal Being.”³² God revealed himself in His creation but that does not mean that the creation could describe who God in detail. This assertion is also important to avoid confusion about the essence of Creator and creation because the Christian faith differs to pantheism that believes the universe itself is god. Christian faith recognizes that creation reveals God's character, but that creation is not the same as God.

An important point to understand about this general revelation is the significance of its presence and why this revelation is general to all mankind. Answering this problem, Ryrie says, “simply because it is a revelation that thus affects all people wherever they are and whenever they have lived it can bring light and truth to all.”³³ The word truth mentioned by Ryrie refers to the content of general revelation, namely what God revealed in revelation. Thus, this point shows a consistency from what I have explained earlier that the purpose of research conducted by scientists to find the laws, rules and various secrets that are hidden in nature, can be classified as truth, (science seeks truth). Therefore, what God states in general

²⁹ Charles C. Ryrie, *Basic Theology* (Wheaton: Victor Books, 1986), 28.

³⁰ Swindoll and Zuck, *Understanding Christian Theology*, 23.

³¹ Bruce A. Demarest, *General Revelation: History Views and Contemporary Issue* (Grand Rapids: Zondervan, 1982).

³² Ryrie, *Basic Theology*, 29.

³³ Ryrie, 28.

revelation, creation, is truth. The truth that God revealed in nature is a truth that is common to mankind; truth addressed to believers (Christians) and non-believers (non-Christians).

The general declaration of God's truth to humans certainly has certain reasons, why is it not included as a specific truth and what is God's purpose for distinguishing it? Why are some revealed to everyone, but some are specific to certain groups of people, believers? To answer this question, general revelation must be seen in relation to special revelation. The author will discuss the special revelation more clearly, but in order to solve this problem the special revelation will be briefly mentioned.

One Truth in Two Revelations: Special and General Revelation

In his review to the thoughts of Cornelius van Til, John Frame summarise van Til's doctrine of revelation as follow,

After man sinned, the message of God's grace was given in additional "special" revelation, communicated through theophany (including the incarnation of the Son of God), prophecy, and miracle, and eventually committed to writing in Scripture. Scripture is God's Word, infallible and inerrant in its original manuscripts.³⁴

It is obvious that the result of sin man became corrupted, as echo by Hoeksema as well, therefore, "he can no longer truly hear the word of God."³⁵ In the light of this understanding, Hoeksema continues "no 'natural theology' can ever be constructed by that fallen man! So darkened is his understanding that he will always lie about the living God."³⁶ Natural theology, as Hoeksema pointed out, refers to the initial creation, before the fall, could lead human to the true Creator God. The broken relationship between God and human, because of sin, impedes human to relate creation to its Creator. Sin covers up human eyes to see what God truly has revealed through his creation.

God reveals Himself in general way to all people, God's world, and in special way to His people, God's word. These two are two distinct revelations. According to Demarest the difference lies in the *content*, each revelation has specific content. What we do have in this world now, the truth in the nature, is not enough to help the sinners come to the true God although it is the truth. He, therefore, added a new content of revelation which cannot reach by human naturally. God reveals a specific revelation to the specific people as Demarest says "we must make a significant addition to our portfolio of divine knowledge. Through Jesus Christ revealed in inspired Scripture, man comes to know God personally in a redemptive relationship."³⁷ There is no personal relationship with God without special content of revelation from God.

Alone, general revelation cannot show all aspects of God's revelation. Van Til explained this as follows: "general revelation as it was originally and as it became after the entrance of sin into the world, we can now turn to the question of special revelation... if we take the two

³⁴ John M. Frame, *Cornelius Van Til: An Analysis of His Thought* (Phillipsburg: Presbyterian and Reformed, 1995), 116.

³⁵ Hoeksema, *Reformed Dogmatics*, 42.

³⁶ Hoeksema, 42.

³⁷ Demarest, *General Revelation: History Views and Contemporary Issue*, 247.

together, we can understand that what is meant by the insufficiency of general revelation."³⁸ The term 'insufficiency of general revelation' used by van Til does not mean that general revelation is not enough in itself, forcing God to give another revelation. This "insufficiency" does not mean a lack of capacity or ability, but points towards the aim of general revelation. Van Til then continued his explanation:

When we speak of the insufficiency of general revelation we do not wish to suggest that this revelation is as such insufficient for its purpose... this revelation was so clear... but in sinning, man, as it were, took out his own eyes, so that he could no longer see God in his general revelation... it is therefore to the condition of man as a sinner, not to man as finite, that the idea of the necessity of a special or saving revelation must be attached.³⁹

Even though the contents of the general revelation do not include the themes of salvation and a personal relationship between God and man, it is important to understand that general revelation is not of a lower hierarchy than special revelation. It does not mean that there is a subordination between God's two revelation to mankind. Although theologians have previously agreed that special revelation came into being because man have sinned, and special revelation came into being for the purpose of reconciling man with the eternal God, there is no hierarchical system that shows that special revelation is higher than general revelation because special revelation talks about salvation. Van Til addressed this issue sternly: "general revelation is sufficient for its historic purpose, which is, of course, to provide a proper background for supernatural redemption and revelation. It is not sufficient to communicate God's saving promise of grace, but that was not its purpose."⁴⁰ Van Til stated that there is no such thing as the superiority of special revelation over general revelation, because both revelations are given by God, both in their own portions, and serve their individual different purposes. This view is not only held by Van Til, but also other conservative evangelical theologians, one of them being Erickson. Erickson recognizes the importance of general revelation, even though it is obscured as a result of sin:

God has given us an objective, valid, rational revelation of himself in nature, history, and human personality. It is there for anyone who wants to observe it. Regardless of whether anyone actually observes it, understands it, and believes it, it is nonetheless present. Although it may well have been disturbed by the fall of man, it is objectively present.⁴¹

Erickson's terms (*objective, valid, rational*) emphasize how God reveals substantial things through general revelation. In addition to Erickson's statement, Frame broke down van Til's explanation, emphasizing that general revelation is authoritative. Here is Frame's explanation on the subject:

General revelation is also authoritative. Evangelicals sometimes think naively that Scripture has more authority than natural revelation. But that is not the teaching of Scripture. Although Scripture has unique role to play in the organism of revelation, as the only divinely authored written revelation, it is no more less

³⁸ Cornelius van Til, *Introduction to Systematic Theology*, ed. William Edgar, 2007, 110.

³⁹ van Til, 110.

⁴⁰ John M. Frame, *Cornelius Van Til: An Analysis of His Thought*, 119.

⁴¹ Millard J. Erickson, *Christian Theology*, 2nd ed. (Grand Rapids: Baker Publishing Group, 1998), 194-95.

authoritative than God's word through nature, for both revelations, exceptional and ordinary, come from God.⁴²

The authoritative source of general revelation is just the same source from which special revelation comes: God, the *principium essendi* of all truth. Both revelations spring from the one same God. Van Til also referred to God's revelation using the term "God's word through nature," to show that general revelation is indeed not of a lower hierarchy than special revelation, and that the things God reveals through general revelation (content) is also not of a lower hierarchy than those God reveals through special revelation.

Before explaining the relationship between general and special revelation further, I will discuss the topic of special revelation. Previously, it has been mentioned that special revelation is defined as God's revelation to sinful man, who do not know God and are not capable of comprehending what God has clearly revealed through His world He created. Bloesch phrased this so well,

Is there a revelation of God in nature? Yes, but only the one who believes perceives it as revelation. The natural person misunderstands it. Fallen humanity has a general awareness of God but not a true understanding. Such knowledge is sufficient to condemn but not to save.⁴³

Bloesch's statement explained the distinction of both revelations clearly. To people that do not receive special revelation, nature is not God's creation, and does not reflect anything. The simplest and most important point in the content of general revelation is that "nature is created by God" (Genesis 1:1). This is not comprehensible by the natural person (sinful person) without the help of special revelation. In other words, one can only identify or recognize general revelation as general revelation through an understanding obtained through special revelation.

Therefore, it is clear that special revelation gives an understanding about things that cannot be understood by mankind due to sin. The relationship that has been damaged because of sin is reconciled through special revelation. General revelation is incomplete without special revelation. Special revelation plays such a significant role, as explained by Demarest: "special revelation is the necessary supplement and interpreter of general revelation."⁴⁴ We can now conclude that special revelation is the key to understanding general revelation, not because it is superior, but because its purpose is to give sinful man an understanding of a different aspect of nature. It is a metaphysical framework to understand reality.

General revelation needs special revelation, and vice versa. Both revelations support and complement each other, creating a comprehensive understanding of all that God reveals to humankind. Van Til concluded this point really well, saying,

Insist that general revelation and special revelation are integrated, rather than sharply distinguished.... man 'could read nature aright only in connection with and in the light of supernatural positive revelation.' After the Fall, that supernatural thought-communication, now a 'special revelation,' became all the

⁴² John M. Frame, *Cornelius Van Til: An Analysis of His Thought*, 118.

⁴³ Donald G. Bloesch, *Holy Scripture: Revelation, Inspiration and Interpretation* (Dwoners Grove: IVP, 1994), 73.

⁴⁴ Demarest, *General Revelation: History Views and Contemporary Issue*, 251.

more necessary, since fallen man naturally distorted the truth of general revelation (Rom. 1:18-32).⁴⁵

Frame uses van Til's idea to explain it more,

At the same time, supernatural thought-communication also presupposes general revelation and therefore cannot be understood without it. Natural revelation, therefore, bears the four attributes traditionally ascribed to Scripture. Like Scripture, natural revelation is necessary, authoritative, sufficient, and perspicuous.⁴⁶

Van Til's emphasis shows the mutual relationship between God's two revelations, so that humankind, particularly those that believe in God's special revelation as stated in the Bible, believe in the "two books of revelation" as two sources of knowledge that cannot be separated. Ryrie explained that "both general and special revelation are (a) from God and (b) about God."⁴⁷ This means that there can be no excuse for accepting one revelation and rejecting the other. Frame formulated the concept as follows: "natural and special revelation, therefore, differ in content. But to understand and to apply each one properly, we need the other."⁴⁸ None of God's revelations are independent.

Truth that is present in nature and in the Bible comes from God alone. No matter who discover it, and no matter where the truth is discovered, truth present in nature is God's truth (all truth is God's truth). This concept is concluded well by Richard Bube:

Science is a human interpretation of data derived from sense contact with [the] created natural world. Its complementary category in Christian faith is not the Bible (which corresponds to the created world – the data) but rather *theology*, which is the interpretation by men of the revealed word of the Bible in the light of Bible and their experience. God make the world, and God gave the Bible. Men make science and men make theology.⁴⁹

Bube equates laws of nature with the Bible as the two sources of truth from God. He also views science with theology as man's interpretation of the two sources of truth. This shows that there are two sources of truth from the authoritative God, the first being the nature with all its laws, and the second being the Bible. Both are equal and cannot be separated.

Analysis

In the light of theological review, out of four model groups proposed by Barbour, we can directly eliminate the first two: the *conflict* and the *independent* models. Our explanation proves that both the systematic faith (theology) and science sprout up from God's revelation – both general and special revelation. The universe is God's creation, and in it, God reveals Himself, revealing to humankind His existence. All laws of nature and all the knowledge and understanding within it comes from God. The Bible, God's word, is also given to sinful man

⁴⁵ John M. Frame, *Cornelius Van Til: An Analysis of His Thought*, 118.

⁴⁶ John M. Frame, 118.

⁴⁷ Charles C. Ryrie, 28.

⁴⁸ John M. Frame, *Cornelius Van Til: An Analysis of His Thought*, 123.

⁴⁹ Richard Bube, "Toward a Christian View of Science," *Journal of the American Affiliation* 32, no. 4 (1973): 3.

so that man can reconcile with God and understand that God is the Creator of the world and everything in it.

Nature (as God's revelation) and the Bible are both authoritative sources, as explained by van Til: "general and special revelation are equally necessary, authoritative, sufficient, and perspicuous."⁵⁰ Doubts targeted towards the Bible's competence in contributing to science are disputed by van Til through this basis:

The uniqueness of special revelation is not that it is more authoritative (or more of the other attributes) than natural revelation. Rather special revelation is unique because it is given for distinct purpose: (1) to guide our interpretation of general revelation, (2) after the Fall, to correct our sinful distortions of general revelation, and (3) to bring us God's promise of salvation through Christ, a message not available through general revelation.⁵¹

He also said, "the necessity of special revelation appears not only with respect to man's failure to know and react to spiritual things right, but also with respect to his inability to interpret 'natural' things a right."⁵² This means there can be no excuse for science to reject contributions from faith, and faith cannot reject corrections and suggestions from scientific findings. Teachings from the Bible are not only necessary for supernatural happenings; they are also crucial for us to have the right understanding of the natural world. Here, we can see that the approach models acceptable are dialogue and integration. However, the *dialogue* approach only allows an overlap of interests, and not an integration of content between faith and scientific data. They essentially still isolate themselves within either the "Bible" or the "scientific" realm. This makes *integration* the only acceptable approach model.

However, integration type still has a variety of forms. Based on the concept asserted by Erickson, Ryrie and specifically van Til, although general and special revelations are authoritative, according to their *specific content* the Bible must become the starting point. Therefore, the right approach based on this analysis of Barbour's terminologies is the theology of nature. This terms, theology of nature, does indeed invite an ambiguity of understanding, however as I discussed above, what is meant here is not the natural theology that was developed in the Middle Ages, but seeing the truth as one in two revelations.

Related to the theme of integration grouping, Brian Eck gave an explanation that is similar and parallel to Barbour's description. Although Eck analyzes the integration study in the more specific field, namely theology and psychology, what Eck does with Barbour's work is essentially the same. Therefore, the writer will provide a parallel grouping of integration conducted by Eck with Barbour's work. In the big picture, Eck only divided this integration group into two big groups, namely *integrative paradigm* and *non-integrative paradigm*. The part that will be highlighted by the writer is the only integrative paradigm because only this type is likely to be consistent with the evaluation above. Eck subdivided this paradigm into two large groups of *manipulative* and *non-manipulative*. When related to Barbour's concept, the theology of nature is parallel with the manipulative paradigm, as defined by Eck thus,

The Manipulative Paradigm accepts that some truth exists in each discipline but does not believe that truth from the other discipline directly admissible into the

⁵⁰ John M. Frame, *Cornelius Van Til: An Analysis of His Thought*, 119.

⁵¹ John M. Frame, 119.

⁵² van Til, *Introduction to Systematic Theology*, 112.

integration process. In this paradigm, data from the other discipline must be altered to become acceptable as data for the process of integration.⁵³

The process of data alteration carried out in this context is based on (1) the nature of scientific theories that can still be falsified by new theories and (2) because the theory of origin is a constructional science theory that gives a wider space than the theory that is already proposed, with a requirement that the theory is still consistent with the theory that is now accepted as a regular theory.

Eck still divided these manipulative types into *reconstructing* and *transform* types. The difference is in the type of reconstructed integration process carried out by “taking the truth from one discipline and subsuming it within the truth of the other [...] the data of one discipline are reconstructed in such a way,”⁵⁴ So, this type stands on one discipline then the material formulation in the other discipline is reconstructed first so that it changes from the original model, then it is integrated with other disciplines. While in transform, which is somewhat similar to non-manipulative, “truly accepts the legitimacy of the data from both disciplines,” the difference is “the data from one discipline must be altered before becoming admissible to the integrative process.” Since the formulas proposed by science are not entirely accepted but it will be reconstructed and this is supported by the nature of the theory of origin, singular science so the type that is appropriate for the discussion in this essay is the *reconstructed type*.

The important thing to note in the integration process is the basis of discipline used. A presupposition is a key to maintain the consistency of the integration process so that it does not go beyond its original purpose. This is clear in Andy McIntosh's statement,

We are always governed by our assumptions. If scientist does not believe in God, then his starting point of atheism will be bound to affect his judgment as he looks at the world around him [...] their conclusions are the product of a mind-set which so deeply affected by atheistic humanism.⁵⁵

This also confirms that the non-manipulative approach is difficult to be applied and in the manipulative approach that tends to be applied is a type of reconstruction. This is because the formulation of science presented to the public is not always purely scientific in part containing politics and as McIntosh said, the basic assumptions of these scientists will be affected. Therefore, sometimes or perhaps almost always, the theory of science needs to be reconstructed before the integration process. Regarding this matter, McIntosh explained, we must recognize that both the thinking and conclusions of the scientists who believe in creation and one, who starts out with atheistic humanism, are entirely consistent with their starting assumptions.⁵⁶ In field of Christian education, Estep and his colleagues develops similar model, called *paradigmatic* approach. Essentially it has the same meaning with reconstruction model as the write, “the social sciences and theology are both valued as necessary and legitimate, both are used simultaneously and interactively.”⁵⁷ Therefore, the approaching

⁵³ Brian E. Eck, “Integrating the Integrators: An Organizing Framework for a Multifaceted Process of Integration,” *Journal of Psychology and Christianity* 15 (1996): 104.

⁵⁴ Eck, 104.

⁵⁵ Andy McIntosh, *Genesis for Today* (Surrey: Day One, 1997).

⁵⁶ McIntosh, 114.

⁵⁷ James R. Estep Jr., Michael J. Anthony, and Gregg R. Alison, *No Title* (Nashville, Tennessee: B & H Publishing Group, 2008), 37.

model that Christians can apply, which cohere to biblical truth, is *reconstruction* or *paradigmatic*.

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